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Dated: 1-27-06

Signature: Maura A. Gallagher  
(Maura A. Gallagher)

1fw  
Docket No.: BBNT-P01-265  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Brig B. Elliott

Application No.: 10/786314

Confirmation No.: 3449

Filed: February 26, 2004

Art Unit: 2131

For: SYSTEMS AND METHODS FOR  
RESERVING CRYPTOGRAPHIC KEY  
MATERIAL

Examiner: Not Yet Assigned

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (SIDS)**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Supplemental Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

The following co-owned pending patent applications may include subject matter similar to that disclosed in this application. One or more office actions may have issued in these cases.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /CLF/

<u>Application No.</u>	<u>Title</u>	<u>Filed</u>	<u>Docket No.</u>
09/943709	Systems And Methods For Path Set-Up In A Quantum Key Distribution Network	August 31, 2001	BBNT-P01-139
09/944328	Quantum Cryptographic Key Distribution Networks With Untrusted Switches	August 31, 2001	BBNT-P01-134
10/197659	Key Distribution Center For Quantum Cryptographic Key Distribution Networks	July 17, 2002	BBNT-P01-164
10/218652	Methods And Systems For Distributing A Group Key In A Quantum Cryptographic Key Distribution Network	August 14, 2002	BBNT-P02-164
10/271103	Systems And Methods For Framing Quantum Cryptographic Links	October 15, 2002	BBNT-P01-231
10/271150	Quantum Cryptographic System With Photon Counting Detector	October 15, 2002	BBNT-P01-188
10/289192	Systems And Methods For Implementing A Unified Framework For Quantum Cryptographic Protocols	November 6, 2002	BBNT-P01-189
10/325325	Systems And Methods For Implementing Adaptive Quantum Cryptography	December 18, 2002	BBNT-P01-219
10/324040	Key Transport In Quantum Cryptographic Networks	December 20, 2002	BBNT-P01-210
10/324355	Systems And Methods For Managing Quantum Cryptographic Networks	December 20, 2002	BBNT-P01-218
10/384502	Autoconfiguration Via Quantum Cryptographic Link Framing	March 7, 2003	BBNT-P01-209
10/394974	Systems And Methods For Implementing A Sifting Protocol For Quantum Cryptography	March 21, 2003	BBNT-P02-189
10/402120	Quantum Cryptography Via Phase-Entangled Encoding	March 28, 2003	BBNT-P01-229
10/434248	Quantum Cipher Key Distribution Via Phase-Entangled Encoding Of Key Symbols	May 7, 2003	BBNT-P01-230
10/462292	Automatic Control Of	June 16, 2003	BBNT-P01-240

<u>Application No.</u>	<u>Title</u>	<u>Filed</u>	<u>Docket No.</u>
	Quantum Key Distribution		
10/462400	Quantum Cryptography Based On Phase Entangled Photons	June 16, 2003	BBNT-P01-241
10/716078	Systems And Methods For Implementing Path Length Control For Quantum Cryptographic Systems	November 18, 2003	BBNT-P02-097
10/716747	Systems And Methods For Implementing Training Frames For Quantum Cryptographic Links	November 18, 2003	BBNT-P02-231
10/795313	Quantum Cryptography With Multiparty Randomness	March 9, 2004	BBNT-P01-268
10/795398	Simple Untrusted Network For Quantum Cryptography	March 9, 2004	BBNT-P01-259
10/797140	Systems And Methods For Implementing Adaptive Training For Quantum Cryptography	March 11, 2004	BBNT-P03-231
10/799177	Systems And Methods For Implementing Routing Protocols And Algorithms For Quantum Cryptographic Key Transport	March 12, 2004	BBNT-P01-015
10/800481	Systems And Methods For Implementing An Error Detection And Correction Protocol For Quantum Cryptography	March 15, 2004	BBNT-P02-021
10/803509	Systems And Methods For Quantum Cryptographic Key Transport	March 18, 2004	BBNT-P01-258

In accordance with 37 CFR 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Supplemental Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Supplemental Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. BBNT-P01-265. A duplicate copy of this paper is enclosed.

Dated: January 27, 2006

Respectfully submitted,

By 

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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			Application Number	10/786314	
			Filing Date	February 26, 2004	
			First Named Inventor	Brig B. Elliott	
			Art Unit	2131	
			Examiner Name	Not Yet Assigned	
Sheet	1	of	4	Attorney Docket Number	BBNT-P01-265

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA*	US-4,649,233	03-10-1987	Bass et al.	
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	AC*	US-5,307,410	04-26-1994	Bennett	
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	AW*	US-5,966,224	10-12-1999	Hughes et al.	
	AX*	US-6,005,993	12-21-1999	MacDonald	
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	AA1*	US-6,122,252	09/2000	Aimoto et al.	
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	AH1*	US-6,563,796	05/2003	Saito, Hiroshi	
	AI1*	US-6,678,379-B1	01/2004	Mayers et al.	
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	AO1*	US-6,529,498	03/2003	Cheng, Dean	
	AP1*	US-6,538,990	03/2003	Prorock, Thomas Joseph	
	AQ1*	US-6,560,707	05/2003	Curtis, et al.	
	AR1*	US-6,654,346	11/2003	Mahalingaiah et al.	
	AS1*	US-6,678,379	01/2004	Mayers et al.	

Examiner Signature	/Christian LaForgia/	Date Considered	06/06/2008
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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /CLF/

Substitute for form 1449A/B/PTO				<b>Complete If Known</b>	
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				Art Unit	2131
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Sheet	2	of	4	Attorney Docket Number	BBNT-P01-265

AT1*	US-6,754,214	06/2004	Mahalingaiah, Rupaka	
AU1*	US-6,836,463	12/2004	Garcia-Luna-Aceves et al.	
AV1*	US-5,764,765	06/1998	Phoenix et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Country Code <sup>1</sup>	Number <sup>2</sup> -Kind Code <sup>3</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an angle asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the FW. \* Applicant's unique citation designation number (optional). \* See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \* Entry Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
CA		"Quantum key distribution: Real-time compensation of interferometer phase drift," NTNU Department of Physical Electronics, pages 1-45. Date Unknown			
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CC		Awduche, D.O., et al., "Multi-Protocol Lambda Switching: Combining MPLS Traffic Engineering Control With Optical Crossconnects," Internet Draft (January 2001).			
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CE		Bennett, C.H., et al., "Experimental Quantum Cryptography," Journal of Cryptography's special issue after Eurocrypt '90, 28 pages (September 1991).			
CF		Bennett, C.H., et al., "Quantum Cryptography: Public Key Distribution and Coin Tossing," Proceedings of IEEE International Conference on Computers, Systems & Signal Processing, Bangalore, India, pp. 175-179, December 10-12, 1984.			
CG		Bethune, D.S., et al., "An Autocompensating Fiber-Optic Quantum Cryptography System Based on Polarization Splitting of Light," IEEE Journal of Quantum Electronics, XX(Y): 100-108 (1999).			
CH		Bethune, D.S., et al., "Prototype Autocompensating Quantum Cryptography System Based on Polarization Splitting of Light," Session QC41 - Quantum Computing and Cryptograph, Oral session, Wednesday morning, March 24, 1999, Liberty Room, Omni Hotel.			
CI		Brassard, G., et al., "Cryptology Column - 25 Years of Quantum Cryptography," Pragocrypt, pp. 13-24 (July 1996).			
CJ		Brassard, G., et al., "Secret-Key Reconciliation by Public Discussion," Department IRO, Université de Montreal, 14 pages (1994).			
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CL		Collins, G.P., "Quantum Cryptography Defies Eavesdropping," Physics Today, pp. 21-23 (Nov. 1992).			
CM		Crepeau, C., et al., "Secure Multi-party Quantum Computation," ACM, pp. 1-10 (2001).			
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Examiner Signature	Date Considered	06/05/2008
/Christian LaForgia/		

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Attorney Docket Number				BBNT-P01-265	
Sheet	3	of	4		

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	CP	Elliott, B.B., et al., "Path-length control in a interferometric QKD link," Proc. of SPIE, Vol. #5101, 11 pages (April 21, 2003).	
	CQ	Elliott, C., "Building the quantum network," New J. Phys., 4:46 (2002).	
	CR	Franson, J.D., "Bell Inequality for Position and Time," Physical Review Letters, 62(19):2205-2208 (1989).	
	CS	Franson, J.D., "Violations of a New Inequality for Classical Fields," John Hopkins University, NTIS-NASA Publication; Goddard Space Flight Center; Workshop in Squeezed States and Uncertainty Relations, Feb. 1991, pp. 23-32.	
	CT	Gisin, N., et al., "Quantum cryptography and long distance Bell experiments: How to control decoherence," Geneva, Switzerland, pages 1-7 and 4 pages of drawings (January 15, 1999).	
	CU	Gisin, N., et al., "Quantum cryptography," Reviews of Modern Physics, 74:145-184 (2002).	
	CV	Gottesman, D., et al., "Secure quantum key distribution using squeezed states," pp. 1-19 (September 25, 2000).	
	CW	Jenniewein, T., et al., "Quantum Cryptography with Entangled Photons," Physical Review Letters, 84(20):4729-4732 (2000).	
	CX	Lin, L.Y., et al., "Free-Space Micromachined Optical Switches for Optical Networking," IEEE Journal of Selected Topics in Quantum Electronics, 5(1):4-9 (1999).	
	CY	Mo, X., et al., "Intrinsic-Stabilization Uni-Directional Quantum Key Distribution Between Beijing and Tianjin," Key Lab of Quantum Information, Department of Electronic Engineering and Information Science, University of Science and Technology of China, Hefei, Anhui, China. Date Unknown	
	CZ	Naik, D.S., et al., "Entangled State Quantum Cryptography: Eavesdropping on the Ekert Protocol," Physical Review Letters, 84(20):4733-4736 (2000).	
	CA1	Phoenix, S.J.D., et al., "Multi-user quantum cryptography on optical networks," Journal of Modern Optics, 42(6):1155-1163 (1995).	
	CB1	Ribordy, G., et al., "Long-distance entanglement-based quantum key distribution," Physical Review A, Volume 63, 012309-1-012309-12 (2001).	
	CC1	Rosen, E., et al., "Multiprotocol Label Switching Architecture," MPLS Architecture, 1-61 (January 2001).	
	CD1	Scarani, V., et al., "Quantum Cryptography Protocols Robust Against Photon Number Splitting Attacks for Weak Lazer Pulse Implementations," Physical Review Letters, 92(5):057901-1 through 057901-4 (February 2004).	
	CE1	Scarani, V., et al., "Quantum cryptography protocols robust against photon number splitting attacks," ICRATO Conference on Quantum Information Science 2003, September 4-6, 2003, Nijijimaikan, Kyoto Japan; 2 pages.	
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	CJ1	Tittel, W., et al., "Long-distance Bell-type tests using energy-time entangled photons," Physical Review A, 59(6):4150-4163 (1999).	
	CK1	Townsend, P.D., "Secure key distribution system based on quantum cryptography," Electronic Letters, 30(10):809-811 (1994).	
	CL1	Townsend, P.D., et al., "Enhanced Single Photon Fringe Visibility in a 10km-Long Prototype Quantum Cryptography Channel," Electronic Letters, 29(14):1291-1293 (1993).	
	CM1	Townsend, P.D., et al., "Single Photon Interference in 10km Long Optical Fiber Interferometer," Electronic Letters, 29(7):634-635 (1993).	
Examiner Signature		/Christian LaForgia/	Date Considered
			06/06/2008

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CN1	Walker, J.A., "Telecommunications Applications of MEMS," mstnews, pp. 6-9 (March 2000).	
CO1	Xiao, L., et al., "Efficient Multi-Party Quantum Secret Sharing Schemes," pp. 1-7 (May 28, 2004).	
CP1	Degermark, M., et al., "Small Forwarding Tables for Fast Routing Lookups," ACM, pp. 3-14 (1997).	
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CR1	Garcia-Luna-Aceves, J. J., et al., "Distributed, Scalable Routing Based on Vectors of Link States," IEEE, pp. 1383-1395 (1995).	
CS1	Garcia-Luna-Aceves, J. J., et al., "Scalable link-state Internet routing," Network Protocols, pp. 52-61 (October 13-16, 1998).	
CT1	Huang, N., "A Novel IP-Routing Lookup Scheme and Hardware Architecture for Multigigabit Switching Routers," IEEE Journal on Selected Areas in Communication, 17(6):1093-1104 (1999).	
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CV1	Lampson, B., et al., "IP Lookups Using Multiway and Multicolumn Search," IEEE/ACM Transactions on Networking, 7(3):324-334 (1999).	
CW1	Ramanathan, R., et al., "Hierarchically-organized, multihop mobile wireless networks for quality-of-service support," Mobile Networks and Applications, 3:101-119 (1998).	
CX1	Tsai, W. T., et al., "An Adaptive Hierarchical Routing Protocol," IEEE Transactions on Computers, 38(8):1059-1075 (1989).	
CY1	Waldvogel, M., et al., "Scalable High Speed IP Routing Lookups," ACM, pp. 25-36 (1997).	
CZ1	Bowers, J.E., "Optical Network and Component Trends," UCSB, NSF Workshop, 51 pages, Date Unknown	
CA2	Honjo, T., et al., "Differential-phase-shift Quantum Key Distribution," NTT Technical Review, 2(12):28-33 (Dec. 2004).	
CB2	Nambu, Y., et al., "BB84 Quantum Key Distribution System based on Silica-Based Planar Lightwave Circuits," Fundamental and Environmental Research Laboratories and Fiber Optic Devices Division, pages 1-11. Date Unknown	
CC2	Paniccia, M., "Silicon Integrated Photonics," UCSB, 30 pages, February 2, 2005.	
CD2	Tomita, A., et al., "Recent Progress in Quantum Key Transmission," NEC J. of Adv. Tech., 2(1):84-91 (Winter 2005).	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Applicant's unique citation designation number (optional). \*Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Christian LaForgia/	Date Considered	06/06/2008
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